

ABSTRACT OF THE DISCLOSURE

A method to protect the contents of an electronic document through an encryption system based on an initial confusing step in a scrambler and a subsequent diffusion step in a chaotic processor, both steps being of a chaotic type. Initially, encryption keys and an initial chaotic value are acquired; input character strings are acquired; and diffused character strings are calculated using the input character strings, the encryption keys, and previous diffused character strings. After a certain number of iterations, sets of diffused character strings are added to subsequent chaotic values generated by a chaotic processor to obtain encrypted words. Decryption is obtained through two successive operations, wherein the encrypted words are added to chaotic values identical to the encryption values and subtracted from previously decrypted words using an unscrambler element having a structure similar to that of the scrambler and using identical encryption keys.

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